

## Comparison of unstimulated salivary flow rate and oral symptoms between premenopausal and postmenopausal women

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### \*Abstract

**Background:** Dry mouth is one of the most common complications during menopause that affects quality of life as well as oral tissue dysfunction.

**Objective:** The aim of this study was to compare the unstimulated salivary flow rate and oral symptoms between premenopausal and postmenopausal women.

**Methods:** This case-control study was conducted in 80 healthy women including 40 postmenopausal women as case group and 40 over 30-year-old premenopausal women as control group. Data were collected through a questionnaire including demographics, oral symptoms and examination. The subjects were asked to avoid eating and drinking 90 minutes before examination. The unstimulated salivary flow rate was measured by spitting method in milliliters per minute. Data were analyzed using Chi-square test, Mann Whitney U test, T-test, and Spearman correlation coefficient.

**Findings:** The mean unstimulated saliva was  $0.182 \pm 0.149$  ml/min and  $0.304 \pm 0.129$  ml/min in postmenopausal and premenopausal women, respectively and the difference was statistically significant. The prevalence of dry mouth was 45% in postmenopausal women and was 12.5% in premenopausal women. Burning sensation in mouth and change in taste sensation were 27.5% and 5% in postmenopausal women and were 2.5% and 0% in premenopausal women. There was negative significant correlation between the unstimulated salivary flow rate and age.

**Conclusion:** The unstimulated salivary flow rate decreases after menopause. Oral symptoms are more prevalent in this period compared to before menopause. These differences may be due to hormonal changes (decreased estrogen and progesterone) during menopause.

**Keywords:** Menopause, Saliva, Taste

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